

IN THE CLAIMS:

These claims will replace all prior versions of claims in the present application.

Claims 1 to 11 are cancelled without prejudice.

12. (New) An electronic component comprising at least one resonator element arranged in a first housing of a case, the case comprising:
a main part with a base and at least one lateral wall of annular shape; and
a cover fixed onto the main part to hermetically seal the first housing of the case,
wherein at least one portion of the cover is transparent to a determined wavelength of a light beam to allow the resonator element to be optically adjusted, wherein the cover is fixed onto a rim of the lateral wall of the main part, wherein the main part is made of a hard material so that one part of the rim surrounds at least certain portions of a lateral surface of the cover and ensures protection of the electronic component against lateral shocks.

13. (New) The electronic component according to claim 12, wherein the hard material is a ceramic material.

14. (New) The electronic component according to claim 12, wherein a height of the one part of the rim surrounding the lateral surface of the cover is larger than or equal to a thickness of the cover fixed onto the rim, and wherein the one part of the rim entirely surrounds the lateral surface of the cover.

15. (New) The electronic component according to claim 12, wherein the transparent cover is a glass cover.

16. (New) The electronic component according to claim 12, wherein the rim of the main part of the case receiving the cover includes a first annular layer of gold plating, wherein a periphery of an inner face of the cover includes a second annular layer of gold plating, and wherein the cover is welded onto the rim using a metal alloy preform arranged between the first annular layer of gold plating and the second layer of gold plating, wherein the metal alloy is formed of tin and gold.

17. (New) The electronic component according to claim 12, wherein a space is provided between the lateral surface of the cover and the one part of the rim surrounding the cover, and the space is substantially of smaller dimensions than the thickness of the cover.

18. (New) The electronic component according to claim 12, wherein the housing of the main part of the case that includes the resonator element is vacuum sealed, wherein the resonator element is a quartz resonator adjustable by a laser beam through the transparent portion of the cover, said quartz resonator comprising a tuning fork with two parallel arms connected to each other by a bridge and carrying electrodes to make the arms vibrate, and wherein the main part of the case further includes at least one stud secured to the base onto which the tuning fork is fixed, and said electrodes are electrically connected through the main part of the case to external connection terminals.

19. (New) The electronic component according to claim 12, further comprising an oscillator circuit electrically connected to the resonator element.

20. (New) The electronic component according to claim 19, wherein the oscillator circuit is arranged in a second housing of the main part, wherein the second housing is

delimited by the lateral wall and the base, and the second housing is arranged on an opposite face of the base to the first housing of the resonator element, wherein said oscillator circuit is encapsulated in the second housing by a resin and is electrically connected to external connection terminals of the electronic component, and wherein the base of the main part of the case includes electrical connection paths for electrically connecting the oscillator circuit and the resonator element.

21. (New) The electronic component according to claim 12, wherein a getter type material is arranged in the housing of the resonator element to act as a vacuum pump when activated.

22. (New) The electronic component according to claim 21, wherein the getter type material is a layer of evaporated titanium or chromium in the housing of the resonator element, and wherein this layer of titanium or chromium is disposed to be activated by means of a laser beam through the transparent portion of the cover so as to act as a vacuum pump and lower the oscillation frequency of the resonator element.

23. (New) The electronic component according to claim 22, wherein the getter type material layer is disposed on a part of the inner face of the cover.

24. (New) A method of manufacturing an electronic component according to claim 12, the method including:

a first series of steps for making the main part of the case by stacking and fixing sheets of hard material worked to define the base and at least one lateral wall; mounting a resonator element in a housing of the case;

a second series of steps for placing the cover on the rim of the main part, wherein the one part surrounds the lateral surface of the cover, and said cover is positioned on the rim by the one part of the rim surrounding the lateral surface of the cover; and
fixing the cover onto the rim by heating metal layers arranged on the rim and the cover.